

SEQUENCE LISTING

<110> Joel CROUZET

Daniel SCHERMAN

Beatrice CAMERON

Pierre WILS

Anne-Marie DARQUET

<120> DNA MOLECULES, PREPARATION AND USE IN GENE THERAPY

<130> MINICIRCLE

<140>

<141>

<160> 50

<170> PatentIn Ver. 2.1

<210> 1

<211> 37

<212> DNA

<213> Séquence artificielle

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<223> Description of the artificial sequence:
oligonucleotide

09981803-101901

<400> 1

aattgtgaag cctgcttttt tatactaact tgagcgg

37

<210> 2

<211> 37

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<223> Description of the artificial sequence:
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aattccgctc aagttagtat aaaaaagcag gcttcac

37

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<211> 21

<212> DNA

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<223> Description of the artificial sequence:
oligonucleotide

<400> 3

ctgcttttttt atactaactt g

21

09991503-101501

<210> 4

<211> 21

<212> DNA

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<223> Description of the artificial sequence:
oligonucleotide

<400> 4

cagctttttt atactaagtt g

21

<210> 5

<211> 21

<212> DNA

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<223> Description of the artificial sequence:
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cagcgcattc gtaatgcgaa g

21

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<211> 21

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oligonucleotide

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cttataattc gtaatgcgaa g

21

<210> 7

<211> 19

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<223> Description of the artificial sequence:
oligonucleotide

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aacactttct taaatggtt

19

<210> 8

<211> 19

<212> DNA

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<223> Description of the artificial sequence:
oligonucleotide

TOPTOT" E09T9650
09981803" 101901

aacactttct taaattgtc

19

<211> 19

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

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aagggattta aaatccctc

19

<210> 10

<211> 19

<212> DNA

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<223> Description of the artificial sequence:
oligonucleotide

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atggtattta aaatccctc

19

<210> 11

<211> 49

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

<400> 11

ttctctgtcg ggggtggcggg atttgaaccc acgacctctt cgtcccgaa

49

05981803-101901

<210> 12

<211> 119

<212> DNA

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<223> Description of the artificial sequence:
oligonucleotide

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ttcttttttt tcttgaagcc tgctttttta tactaagttg gcattataaa aaagcattgc 60
ttatcaattt gttgcaacga acaggtcact atcagtcaaa ataaaatcat tatttgatt 119

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<212> DNA

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oligonucleotide

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ttctttttttt tcttgaagcc tgctttttta tactaacttg agc

43

<210> 14

<211> 27

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

<400> 14

cgtcgaaata ttataaatta tcagaca

27

<210> 15

<211> 25

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

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gaggcttctt cttcttcttc ttctt

25

<210> 16

09981303-101901

<211> 20

<212> DNA

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<223> Description of the artificial sequence:
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ttctttcttgc ttctcttctt

20

<210> 17

<211> 20

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

<400> 17

ttctttcttgt ttctcttctt

20

<210> 18

<211> 20

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:

oligonucleotide

<400> 18

ttctttcttcc ttctcttctt

20

<210> 19

<211> 20

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
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aagaagcatg cagagaagaa

20

<210> 20

<211> 57

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

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gatccgaaga agaagaagaa gaagaagaag aagaagaaga agaagaagaa gaagaac

57

09981303 "101901
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<210> 21

<211> 57

<212> DNA

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<223> Description of the artificial sequence:

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<210> 22

<211> 66

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:

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<400> 22

gatctgaaga agaagaagaa gaagaagaag aagaagaaga agaagaagaa gaagaactgc 60

agatct 66

<210> 23

<211> 66

<212> DNA

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<223> Description of the artificial sequence:
oligonucleotide

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tcttca 66

<210> 24

<211> 56

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

<400> 24

gatcagatct gcagttcttc cttcttcttc ttcttcttct tcttcttctc ttctca 56

<210> 25

<211> 21

<212> DNA

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<223> Description of the artificial sequence:
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<400> 25

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<210> 26

<211> 56

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

<400> 26

agcttctcga gctgcaggat atcgaattcg gatcctctag agcggccgcg agctcc 56

<210> 27

<211> 56

<212> DNA

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<223> Description of the artificial sequence:
oligonucleotide

<400> 27

agctggagct cgcggccgct ctagaggatc cgaattcgat atcctgcagc tcgaga 56

<210> 28

<211> 49

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

<400> 28

actagtggcc atgcatccgc tcaagttagt ataaaaaagc aggcttcag

49

09951003-101901

<210> 29

<211> 57

<212> DNA

<213> Artificial sequence

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oligonucleotide

<400> 29

agctctgaag cctgcttttt tatactaact tgagcggatg catggccact agtagct

57

<210> 30

<211> 29

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

<400> 30

gcgtctagaa cagtatcgtg atgacagag

29

<210> 31

<211> 29

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

<400> 31

gccaagctta gctttgcact ggattgcga

29

<210> 32

<211> 14

<212> DNA

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<223> Description of the artificial sequence:
oligonucleotide

<400> 32

aagaaaaaaaa agaa

14

<210> 33

<211> 36

<212> DNA

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<223> Description of the artificial sequence:
oligonucleotide

<400> 33

aaagatccgc gtcgactttg tgcttctctg gagtgc

36

<210> 34

<211> 23

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

<400> 34

aaacctagga aatcaaataa tga

23

<210> 35

<211> 47

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

<400> 35

tcgagttctt ttttttcttg aagcctgctt ttttactaac ttgagcg

47

09981303-101901
T06T0T "E09T3660

<210> 36

<211> 49

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

<400> 36

agctcgctca agttagtata aaaaagcagg cttcaagaaa aaaaagaac

49

<210> 37

<211> 30

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

<400> 37

atcctaggtc attatttgat ttcaattttg

30

<210> 38

<211> 40

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

<400> 38

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40

09981803-101901

<210> 39

<211> 61

<212> DNA

<213> Artificial sequence

<220>

<223> Description of the artificial sequence:
oligonucleotide

<400> 39

ctaggataaa ccgatacaat taaaggctcc ttttggagcc tttttttttg gagaactagt 60
a 61

<210> 40

<211> 61

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

<400> 40

cgcgtagctag ttctccaaaa aaaaaggctc caaaaggagc ctttaattgt atcggtttat 60
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<210> 41

<211> 23

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

<400> 41

aaactcgagc aatgcttgca taa 23

<210> 42

<211> 23

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

<400> 42

aaacatatgt tcaactccatc caa 23

<210> 43

<211> 22

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

<400> 43

aaaactagta tggcgattgc aa

22

<210> 44

<211> 22

<212> DNA

<213> Artificial sequence

<220>

<223> Description of the artificial sequence:
oligonucleotide

<400> 44

aaagaattcg cagtcaaacg cg

22

<210> 45

<211> 27

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

09981803 "101901
105707" 5096660

27

30

12

<211> 14

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

<400> 48

ttctttttttt tctt

14

TTTTTTT"TTTTTTT

<210> 49

<211> 25

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

<400> 49

aaaggcgcca gcttaaaaaa aatcc

25

<210> 50

<211> 20

<212> DNA

<213> Artificial sequence

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<223> Description of the artificial sequence:
oligonucleotide

<400> 50

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20

09981803-101901
T05TDT" E09T2660